

**REMARKS**

**I. Status of the Application.**

Claims 1-6, 9-20, and 25 of the Application were pending as of the date of the Office Action. In the Office Action, the Examiner rejected claims 1-6, 9-20, and 25 under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent Publication No. 2003/0150909 to Markham ("Markham") in view of U.S. Patent Number 6,421,571 to Spriggs et al. ("Spriggs") in further view of U.S. Patent No. 6,524,230 to Harding et al. ("Harding"). Applicants respectfully submit that the foregoing amendments and following remarks incorporated herein overcome the Examiner's rejections of the Application.

**II. Applicants' Amendments Do Not Constitute New Matter.**

Applicants respectfully submit that the amendments to claims 1, 4, 12, 14, and 16 do not constitute new matter in the Application because support for the amended claims is provided in the Application as originally filed. Applicants have merely clarified the claim limitations of claim 1 and amended claim 12 to incorporate previously presented claim limitations. In order to properly incorporate the amendments to claims 1 and 12, Applicants have further amended claims 4, 14 and 16 so that these claims relate appropriately back to their respective base claims 1 and 12. Applicants have further canceled claims 15 and 17. Therefore, because the amendments to the aforementioned claims merely act to clarify the claims in light of the specification and incorporate previously submitted claim limitations, Applicants respectfully submit that the amendments should be accepted and entered.

**III. The Rejections of Claims 1-6, 9-20, and 25 Under 35 U.S.C. § 103(a) As Being Obvious Over Markham In View of Spriggs and Further In View Of Harding Should Be Withdrawn.**

Applicants respectfully submit that the rejections of claims 1-6, 9-11, 14-17, 20 and 25 should be withdrawn because Markham, Spriggs, and Harding, in combination, do not disclose, teach, or suggest all the limitations of claims 1, 14, and 20. The Examiner supported her obviousness allegations based on her belief that the cited prior art taught all the elements of the claims. (Office Action, pp. 4-6). Applicants respectfully disagree with this conclusion. As discussed at length in Applicants' prior papers, the combination of Markham, Spriggs, and Harding does not disclose, teach or suggest a method of monitoring and controlling a manufacturing method that has all of the steps of setting at least one specification and at least one alarm for the at least one product, automatically collecting and storing product specific data at regular time intervals, comparing the collected product specific data to the at least one alarm and/or specification, and notifying the at least one user in real time when the product specific data triggers the at least one alarm and/or the at least one specification.

In responding to the Applicants' previous arguments, the Examiner alleges that Applicants are merely attacking the references individually, not addressing the combination of references, and arguing that Spriggs and Markham are directed towards nonanalogous art (Office Action, pages 15-16). Applicants respectfully submit that the Examiner has misconstrued Applicants' previously submitted arguments. Applicants are not merely attacking the references individually or asserting that Spriggs and Markham are directed towards nonanalogous art. Rather, as further described herein, Applicants are specifically pointing to the combination of the

references and outlining why the combination of references does not disclose, teach or suggest all of the limitations of the claims.

As defined in the Application, the claimed steps of setting the at least one alarm and the at least one specification involve setting measurements of data that are specifically related to a product. Moreover, when setting the at least one alarm and at least one specification, the alarm and specifications are set so that the alarm and specification are measuring the same type of product data and the alarm will be triggered prior to the measurement of data reaching the specification. By setting the alarm in this manner, remedial actions can occur prior to the specification not being met. Specifically, the Applicants have defined the claim term "specification" to mean "the values of a measure of a product that generally should not be exceeded or that generally should be exceeded for the user to be able to sell the product" and the claim term "alarm" to mean the "values of a measure of a product that are close to and/or fall within the range of the values of the specification, so that when the alarm values are reached, the user will be notified that the measure is close to the specifications." (Application, p. 13, ll. 16-21).

In contrast, the combination of Markham, Spriggs, and Harding does not yield a system that sets at least one alarm and at least one specifications that are "values of a measure of a product", wherein the at least one alarm is close to and/or falls within the range of the values of the specification. In outlining the rejection, the Examiner only sites Markham as the reference that discloses the steps of setting the at least one specification and at least one alarm (Office Action, page 3). Markham discloses a system for ensuring that a manufacturing system is operating in accordance with a prescribed budget and allows for pre-defined key performer

indicators to be set by a financial department to measure productivity and waste. (para. [0002, 0009, 0035, 0049, 0083-93]). However, as noted in Applicants' prior responses, Markham only allows for a system to set financial alerts for pre-defined events and to generate a report from the information collected after the alert is triggered by an event. (para. [0057-0062]).

In the Office Action, the Examiner asserts that the setpoints described in paragraph [0183] of Markham comprise the claimed step of setting at least one specification and that the alerts described in paragraph [0058] and [0064] comprise the claimed step of setting at least one alarm. (Office Action, p. 3). Applicants respectfully disagree. As described in Markham, the setpoints are information that "may be tracked and recorded in an audit table that is part of or linked to PIPE data such that the setpoints used for any particular production run may be associated with the products for subsequent analysis or for providing documentation needed for regulatory compliance" [Para. 0183]. For the sake of argument, even if Applicants assume the Examiner is correct that these setpoints of Markham are the claimed specifications, the financial alerts described in paragraphs [0058] and [0064] are not set relative to the setpoints and in effect, Markham's alert is not triggered prior to a setpoint being reached. Rather, the Markham alerts are set to only define a certain threshold of waste or delay in the system that if exceeded, will lead to the Markham system collecting and storing data. (para. [0061]).

As defined in the Application, Applicants' claimed alarms are "values of a measure of a product that are close to and fall within the range of the values of the specification, so that when the alarm values are reached, the user will be notified that the measure is close to the specifications." (Application, p. 13, ll. 16-19). In Markham, the alerts described in paragraphs [0058] and [0064] are not defined so that the alerts are close to and/or fall within a range of the

setpoints described in paragraph [0183]. Rather, Markham's alerts are set to only define a certain threshold of waste or delay in the system that if exceeded, will lead to the Markham system collecting and storing data, irrespective of the setpoints that are gathered by the Markham system (para. [0057-0062] and [0183]). Thus, even assuming the Examiner is correct that the setpoints are equivalent to the defined specifications, Markham does not disclose, teach or suggest the step of setting at least one alarm that is close to and falls "within the range of the values of the specification, so that when the alarm values are reached, the user will be notified that the measure is close to the specifications."

Applicants respectfully submit that the combination of Markham with Spriggs and Harding also does not disclose, teach or suggest the steps of setting at least one alarm and at least one specifications that are "values of a measure of a product", wherein the at least one alarm is close to and/or falls within the range of the values of the specification. As explained in Applicants' prior responses, Spriggs discloses collecting data related to the equipment or assets and the alarms in Spriggs are set to only define a measurement that indicate when an asset or equipment needs maintenance. (Col. 1, ll. 50-67; Col. 2, ll. 1-3). Similarly, Harding discloses a system that uses a controller to monitor and provide diagnostic information for one or more packing conversion machines and to provide visual and/or audible indications of such characteristics via a display. (Col. 2, ll. 32-43 and Col. 4, ll. 60-67; Col. 5, ll. 1-6). Similar to Markham, neither Spriggs nor Harding disclose, teach or suggest the steps of setting at least one specification and setting at least one alarm that is close to and falls "within the range of the values of the specification, so that when the alarm values are reached, the user will be notified that the measure is close to the specifications."

Moreover, the combination of these references would still not yield a system that has the steps of setting at least one specification and at least one alarm, because none of the alerts, setpoints, alarms, and indication described in Markham, Spriggs, and Harding are defined relative to one another. As defined in the Application, to accomplish the step of setting the alarm, the method must set the alarm so that it is close to and falls "within the range of the values of the specification, so that when the alarm values are reached, the user will be notified that the measure is close to the specifications." The combinations of the references of Markham, Spriggs, and Harding does not yield such a step because none of the references disclose, teach or suggest setting an alarm that is close to and falls "within the range of the values of the specification, so that when the alarm values are reached, the user will be notified that the measure is close to the specifications."

In the Office Action, the Examiner acknowledges that Markham and Harding do not disclose or teach setting such an alarm, but alleges that Spriggs teaches such a step. (Office Action, p. 14). Applicants respectfully disagree with this conclusion. Spriggs only discloses a method for defining alarms that indicate when the assets or equipment need maintenance and does not disclose the claimed steps of setting specifications that indicate when the product is acceptable and setting alarms that indicate when the manufacturing sub-process is producing a product that is nearing the set specifications. Applicants' claimed specifications and alarms are defined as being specific "values of a measure of a product." (Application, p. 13, ll. 16-21). Spriggs does not allow a user to set such limits that are product related but rather, only allows alarms to be set for the plant assets or equipment. Thus, Spriggs does not permit a user to set an alarm for a value of a measure of a product that falls near or within the specifications, because

Spriggs only measures data related to plant assets and equipments not data related to the product. For the reasons described above and the fact the Examiner already admits that Markham and Harding do not disclose or teach the claimed step of setting an alarm for a value of a measure of a product within the range of the values of the specification, Applicants respectfully submit the combination of Markham, Spriggs, and Harding does not disclose, teach or suggest the claimed step of setting an alarm (as defined in the Application).

Further, as discussed in Applicants' previous response and again referenced in the Office Action, the Examiner has specifically noted that both Markham and Spriggs do not teach the steps of automatically collecting product specific data and storing such data at regular time intervals. (Office Action, pgs. 4, 8-9). Rather, the Examiner asserts that Harding teaches data is automatically collected and stored at regular time intervals. Thus, the Examiner surmises that combining Markham, Spriggs and Harding yields a system that teaches all of the claim limitations. Applicants respectfully disagree with this conclusion.

Applicants respectfully submit that the combination of Markham, Spriggs and Harding does not yield the claimed invention, because the combination of references does not disclose, teach or suggest automatically collecting and storing product specific data in regular time intervals, comparing such collected product specific data to an alarm and/or specification, and notifying a user when such product specific data triggers the alarm and/or the specification. As discussed above, Markham discloses a system for ensuring that a manufacturing system is operating in accordance with a prescribed budget and allows for pre-defined key performer indicators to be set by a financial department to measure productivity and waste. (para. [0002, 0009, 0035, 0049, 0083-93]). This data is monitored by the Markham system and when it

triggers an alert, the data will be recorded by the Markham system. (para. [0214]). While Markham might disclose other data can be added to the database, Markham only discloses that it is the financial set alerts data that can cause the system and does not disclose, teach or suggest automatically collecting and storing product specific information at regular time intervals and comparing such automatically collected product specific information to an alarm.

Harding discloses a method and apparatus for making packing materials that includes the use of a controller that communicates with various sensors and measuring devices in order to monitor and provide diagnostic information for one or more packing conversion machines. (Col. 2, ll. 32-43). While Harding discloses that data can be collected at predetermined time intervals; such as, every five minutes, thirty minutes, each hour or each day, the data being collected in Harding is not product specific data, but rather, is data related specifically to the operating characteristics of the conversion machines (Col. 4, ll. 60-67; Col. 5, ll. 1-6). It is this machine related data that is accessed by the end user.

Similarly, Spriggs discloses a method for monitoring plant assets or equipment to determine when the assets or equipment need some type of maintenance to ensure the assets or equipment is functioning properly. Spriggs only compares the data to set alarms that indicate when the assets or equipment need maintenance. Thus, like Harding and Markham, Spriggs also does not disclose, teach or suggest a method for automatically collecting and storing product specific data and comparing such collected product specific data to an alarm and/or specification.

Because none of the references disclose comparing the automatically collected product specific data to an alarm and/or specification, Applicants respectfully submit that the combination of Markham, Spriggs, and Harding does not disclose a method of monitoring and



controlling a manufacturing process that comprises all the steps of automatically collecting and storing product specific data in regular time intervals, comparing such collected product specific data to an alarm and/or specification, and notifying a user when such collected product specific data triggers the alarm and/or the specification. Further, Applicants respectfully submit that the combination of Markham, Spriggs, and Harding does not disclose, teach or suggest these steps because as explained above, the combination of Markham, Spriggs and Harding does not disclose, teach or suggest setting an alarm that is close to and falls "within the range of the values of the specification, so that when the alarm values are reached, the user will be notified that the measure is close to the specifications." Thus, because the combination of these references does not disclose, teach or suggest setting the claimed alarm, the combination of the references cannot be said to disclose, teach or suggest the step of comparing the product specific data to the at least one alarm and/or specification and notifying at least one user in real time when product data triggers the alarms and/or specifications. If the combination does not permit a user to set such alarms, it also follows that the combination cannot compare the product specific data to such an alarm or notify a user when the alarm is triggered.

For at least these reasons, Applicants respectfully submit that neither Markham, Spriggs, nor Harding, alone or in combination, disclose all of the limitations of claims 1-3, 5-6, 9-13, 14, 16, 18-20 and 25 and the rejection of these claims under 35 U.S.C. § 103(a) as being obvious over Markham in view of Spriggs and in further view of Harding should be withdrawn. As discussed above, the claimed methods differ from the combination of Markham, Spriggs, and Harding because such a combination does not disclose, teach or suggest a method of monitoring and controlling a manufacturing process that comprises all of the steps of setting at least one

specification and at least one alarm for the at least one product, automatically collecting and storing product specific data at regular time intervals, comparing the collected product specific data to the at least one alarm and/or specification, and notifying the at least one user in real time when the product specific data triggers the at least one alarm and/or the at least one specification. It is these steps that in turn will allow the user to take proactive means to prevent or substantially reduce that amount of faulty products from being produced.

**IV. Applicants Petition for an Extension of Time and Request for Continued Examination.**

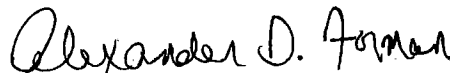
Applicants hereby petition for an extension of time of three (3) months, under 37 C.F.R. § 1.136(a), thereby extending the deadline for response, pursuant to 37 C.F.R. §§ 1.7(a) & 1.136(a), to Thursday, June 23, 2009. Applicants also request continued examination by submitting a Request for Continued Examination transmittal form, this response and payment of the filing fee of \$810.00. Applicants authorize payment for this extension of time in the amount of \$1,110.00 and for this request for continued examination in the amount of \$810.00 to be charged to the identified credit card. When doing so, please reference the above-listed docket number for this file.

**CONCLUSION**

For all of the foregoing reasons, it is respectfully submitted that claims 1-3, 5-6, 9-14, 16, 18-20 and 25 are allowable claims and Applicants have made a patentable contribution to the art. Applicants also respectfully submit that the rejections of claims 4, 15, and 17 are moot and should be withdrawn because each of these claims have been canceled. Favorable reconsideration and allowance of this Application is therefore respectfully requested. In the event the Applicants have inadvertently overlooked the need for payment of an additional fee, Applicants conditionally petition therefore, and authorize any deficiency to be charged to deposit account 09-0007. When doing so, please reference the above-listed docket number.

Respectfully submitted,

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